

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference JNTTCS-4-PCT	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/JP2005/002514	International filing date (<i>day/month/year</i>) 10/02/2005	(Earliest) Priority Date (<i>day/month/year</i>) 10/02/2004
Applicant NTT COMMUNICATIONS CORPORATION		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. **Certain claims were found unsearchable** (See Box II).

3. **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 1

as suggested by the applicant.

as selected by this Authority, because the applicant failed to suggest a figure.

as selected by this Authority, because this figure better characterizes the invention.

b. none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/JP2005/002514

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04L9/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 411 716 B1 (BRICKELL ERNEST F) 25 June 2002 (2002-06-25) abstract column 15, line 33 – column 16, line 32 column 20, line 19 – column 23, line 41 column 24, line 8 – column 25, line 15 ----- EP 0 723 348 A (INTERNATIONAL BUSINESS MACHINES CORPORATION) 24 July 1996 (1996-07-24) abstract page 5, line 45 – page 13, line 54 figures 3-5 ----- -/-	1-6, 15, 16
X		1, 2, 4-6, 15, 16

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

° Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

7 June 2005

Date of mailing of the international search report

16/06/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl.
Fax: (+31-70) 340-3016

Authorized officer

Dujardin, C

INTERNATIONAL SEARCH REPORT

Inte	l Application No
PCT/JP2005/002514	

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 675 649 A (BRENNAN ET AL) 7 October 1997 (1997-10-07) abstract column 3, line 28 - column 6, line 10 figures 1-3 ----- US 6 209 091 B1 (SUDIA FRANK W ET AL) 27 March 2001 (2001-03-27) abstract column 4, line 42 - column 9, line 34 column 12, line 15 - column 13, line 41 column 21, line 44 - column 24, line 36 column 25, line 65 - column 26, line 12 figures 1,22,23 -----	1,2,4-6, 15,16 1-6,15, 16

INTERNATIONAL SEARCH REPORT

Information on patent family members

Int'l Application No	PC1/JP2005/002514
-------------------------	-------------------

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
US 6411716	B1 25-06-2002	US	5867578 A	02-02-1999
		AU	718265 B2	13-04-2000
		AU	5552196 A	24-12-1996
		BR	9608416 A	29-12-1998
		CA	2223305 A1	12-12-1996
		CN	1192834 A	09-09-1998
		EP	0872080 A1	21-10-1998
		GB	2301919 A ,B	18-12-1996
		GB	2337145 A ,B	10-11-1999
		IL	118363 A	17-02-2000
		JP	11506222 T	02-06-1999
		NZ	306846 A	28-01-2000
		NZ	500372 A	27-04-2001
		WO	9639765 A1	12-12-1996
		US	6209091 B1	27-03-2001
		US	5825880 A	20-10-1998
		ZA	9603635 A	19-11-1996
EP 0723348	A 24-07-1996	US	5625692 A	29-04-1997
		EP	0723348 A2	24-07-1996
		JP	3256427 B2	12-02-2002
		JP	8251157 A	27-09-1996
US 5675649	A 07-10-1997	NONE		
US 6209091	B1 27-03-2001	US	5825880 A	20-10-1998
		US	2002013898 A1	31-01-2002
		AU	718265 B2	13-04-2000
		AU	5552196 A	24-12-1996
		BR	9608416 A	29-12-1998
		CA	2223305 A1	12-12-1996
		CN	1192834 A	09-09-1998
		EP	0872080 A1	21-10-1998
		GB	2301919 A ,B	18-12-1996
		GB	2337145 A ,B	10-11-1999
		IL	118363 A	17-02-2000
		JP	11506222 T	02-06-1999
		NZ	306846 A	28-01-2000
		NZ	500372 A	27-04-2001
		WO	9639765 A1	12-12-1996
		US	6411716 B1	25-06-2002
		US	5867578 A	02-02-1999
		ZA	9603635 A	19-11-1996
		AP	626 A	16-01-1998
		AT	202439 T	15-07-2001
		AU	1680395 A	01-08-1995
		AU	4461999 A	28-10-1999
		AU	705473 B2	20-05-1999
		AU	6084296 A	10-10-1996
		BR	9506414 A	09-09-1997
		CA	2176032 A1	20-07-1995
		CN	1138927 A	25-12-1996
		CZ	9601978 A3	12-03-1997
		DE	69521413 D1	26-07-2001
		DE	69521413 T2	29-05-2002
		DK	739560 T3	01-10-2001
		EP	0739560 A1	30-10-1996
		ES	2158081 T3	01-09-2001

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/JP2005/002514

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6209091	B1	GR 3036650 T3	31-12-2001
		HU 75800 A2	28-05-1997
		JP 9507729 T	05-08-1997
		NZ 279622 A	27-04-1998
		NZ 329891 A	28-01-2000
		OA 10456 A	27-03-2002
		PL 315574 A1	12-11-1996
		PT 739560 T	28-12-2001
		WO 9519672 A2	20-07-1995
		US 5857022 A	05-01-1999
		US 6009177 A	28-12-1999
		US 5872849 A	16-02-1999
		US 5850451 A	15-12-1998
		US 5799086 A	25-08-1998
		US 5841865 A	24-11-1998